

**ABSTRACT**

Methods and apparatuses for the processing of false alarms in position determination. At least one embodiment of the present invention estimates and uses measurement false alarm probabilities in the position determination process. In one embodiment, the estimated measurement false alarm probabilities are combined to determine the reliability of the determined position solution or the reliability of the set of measurements as a collection. In one embodiment, the estimated measurement false alarm probabilities are used in the isolation and elimination of faulty measurements. For example, the traditional geometry based metric for identifying a faulty measurement is further weighted according to the measurement false alarm probabilities in order to determine the faulty measurement.